

<b>50 Ω</b>	<b>DC - 40 GHz</b>
-------------	--------------------

## GENERAL

- Ultra miniature
- Blindmate
- Excellent vibration and shock performances

## APPLICATIONS

- High density packaging
- Phased array antenna
- Satellite
- Airborne/Shipborne/Ground radar
- Communication equipment

The SBMO series offers 3 levels of retention provided by the connectors with male center contact :

- **smooth bore**, for the lowest retention (upon request)
- **limited detent** for a positive locking with a higher retention
- **full detent** for a positive locking with a maximum retention.

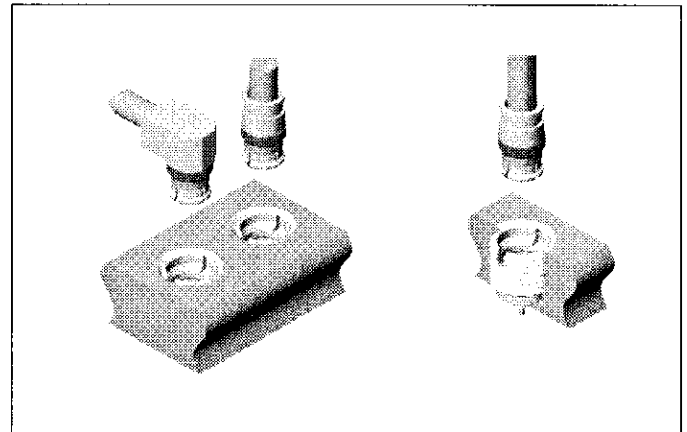
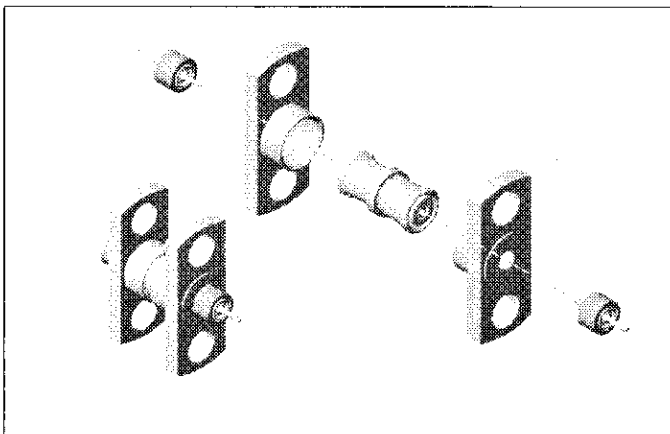
The SBMO series is **compatible with SMP** connectors and meets the **DESC** specifications 94007 & 94008.

Their small size permits connector center-to-center spacing as low as 4.8 mm.

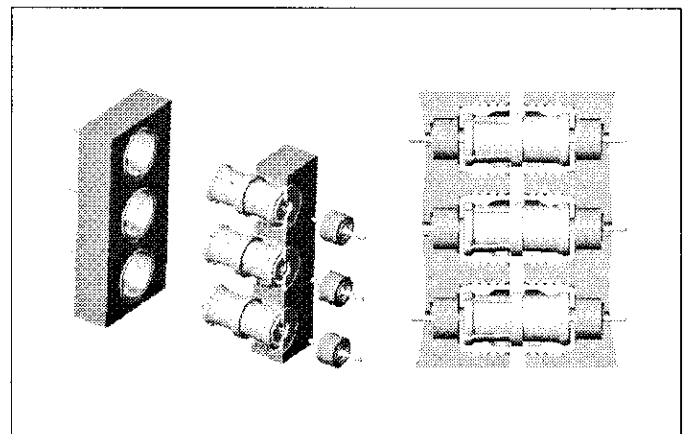
### Typical combinations of SBMO connectors :

Cable to module ►

▼ Module to module (2 hole flange shroud)



▼ Thread-in shroud for limited space





## ELECTRICAL CHARACTERISTICS

Impedance	50 Ω		
Frequency range	DC - 40 GHz		
Typical V.S.W.R.	DC-18 GHz	18-26.5 GHz	26.5-40 GHz
<i>Straight styles</i>	1.20	1.35	1.7
<i>Right angle styles</i>	1.20	1.35	-
<i>Adapter</i>	1.10	1.15	1.7
Insertion loss (dB)	0,12 √F (F in GHz)		
Insulation resistance (MΩ)	5000		
Voltage rating (VRMS)	335		
Dielectric withstanding voltage (VRMS)	500		
RF leakage	-80 dB to 3 GHz, -65 dB from 3 to 26.5 GHz		

## ENVIRONMENTAL CHARACTERISTICS

Operating temperature	<i>Semi rigid cable connectors</i> <i>Receptacles and shrouds</i>	- 65°C / + 105°C - 65°C / + 165°C
-----------------------	--	--------------------------------------

## MECHANICAL CHARACTERISTICS

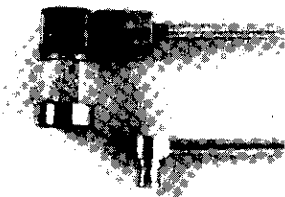
		smooth bore	limited detent	full detent
Mechanical endurance (matings)		1000	500	100
Engagement and separation force (N)		9 max. - 2.2 min.	45 max. - 9 min.	67 max. - 22 min.
Radial misalignment		± 0.25 mm		
Axial misalignment		0, + 0.25 mm		
Vibration		MIL-STD-202 method 204, test condition D		
Shock		MIL-STD-202 method 213, test condition I		
Thermal shock		MIL-STD-202 method 107, test condition B		
Cable retention (N)	.047" .085"		45 200	
Contact captivation axial (N)			6.68	

## MATERIALS and PLATING

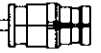
	MATERIALS	PLATING
Cable connector with female center contact	Beryllium copper	Gold
Cable connector with male center contact	Stainless steel Brass	Passivated Gold
Receptacles, shrouds	Stainless steel	Passivated
In series adapters	Beryllium copper	Gold
Center contacts	Beryllium copper	Gold
Center contacts for glass seal	Ferro-nickel	Gold
Insulators	PTFE	

Packaging : **Standard** 100 pieces - **Unit** add W after the P/N

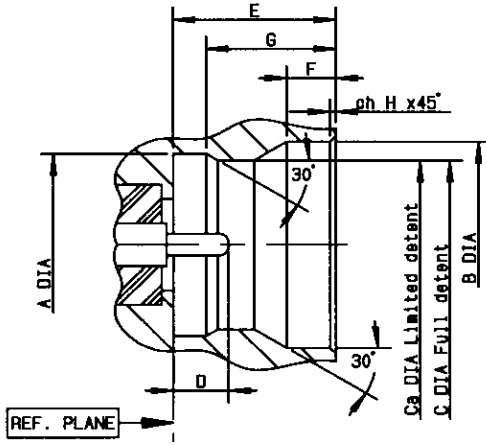
All dimensions are given in mm.



The **SBMO** small size dramatically increases the packaging density (see picture : **SMA 2.9/SBMO**).

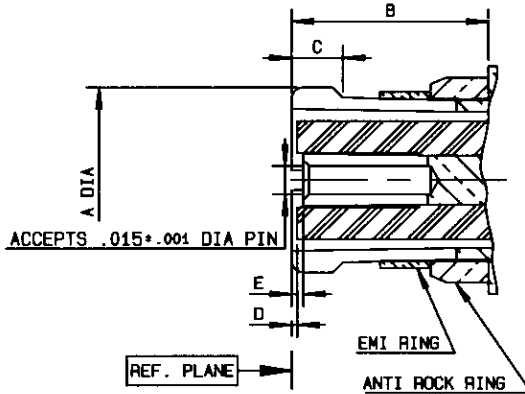


### CONNECTOR WITH MALE CENTER CONTACT FULL AND LIMITED DETENT



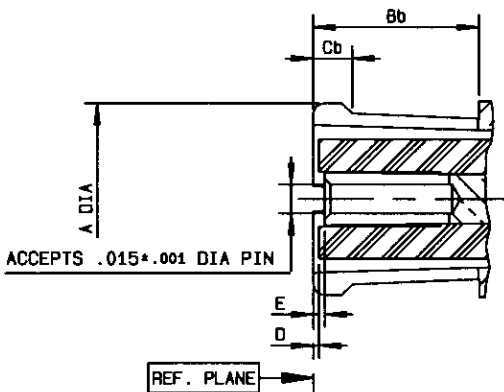
LETTER	mm		inch	
	min.	max.	min.	max.
A DIA	3.12	3.22	.123	.127
B DIA	3.53	3.68	.139	.145
C DIA	2.9	3	.114	.118
Ca DIA	3.00	3.10	.118	.122
D	1.15	1.4	.045	.055
E	2.75	2.85	.108	.112
F	0.84	0.94	.033	.037
G	2.18	2.29	.086	.090
H	0.10	0.15	.004	.006

### CONNECTOR WITH FEMALE CENTER CONTACT



LETTER	mm		inch	
	min.	max.	min.	max.
A DIA		3.4		.135
B	3.35		.132	
C	0.64	0.89	.025	.035
D	0	0.15	0	.006
E	0	0.20	0	.008

### ADAPTER



LETTER	mm		inch	
	min.	max.	min.	max.
A DIA		3.4		.135
Bb	2.8		.112	
Cb	0.46	0.64	.018	.025
D	0	0.15	0	.006
E	0	0.20	0	.008